

Surface mount Bandpass Filter

MBPA-A693+

Typical Performance Data

FREQ. (MHz)	INSERTION LOSS			INPUT RETURN LOSS			OUTPUT RETURN LOSS		
	(dB)			(dB)			(dB)		
	@-40°C	@+25°C	@+85°C	@-40°C	@+25°C	@+85°C	@-40°C	@+25°C	@+85°C
1	96.89	95.69	104.94	0.05	0.05	0.05	0.05	0.05	0.05
5	102.69	100.96	104.67	0.05	0.05	0.05	0.05	0.05	0.05
10	95.79	95.03	97.07	0.04	0.04	0.04	0.04	0.04	0.04
50	91.90	91.19	92.44	0.04	0.04	0.04	0.04	0.04	0.04
100	86.58	86.71	86.76	0.05	0.06	0.08	0.05	0.06	0.08
200	79.54	79.50	79.52	0.12	0.16	0.20	0.13	0.16	0.20
250	77.17	77.32	77.24	0.17	0.21	0.26	0.18	0.21	0.26
300	74.56	74.69	74.60	0.21	0.25	0.30	0.22	0.25	0.30
400	67.35	67.31	67.56	0.25	0.31	0.37	0.26	0.31	0.37
450	61.10	61.07	61.06	0.26	0.32	0.39	0.27	0.33	0.39
500	52.38	52.33	52.25	0.28	0.34	0.41	0.28	0.34	0.41
550	39.82	39.73	39.48	0.30	0.37	0.44	0.31	0.37	0.44
570	32.91	32.78	32.47	0.34	0.41	0.48	0.34	0.41	0.48
580	28.80	28.64	28.30	0.37	0.45	0.53	0.37	0.45	0.53
590	24.07	23.88	23.49	0.45	0.53	0.61	0.45	0.54	0.62
622	3.80	3.79	3.69	6.38	7.14	8.15	6.87	7.76	8.99
660	1.34	1.51	1.65	24.02	25.74	27.53	20.37	20.93	21.46
665	1.31	1.48	1.63	34.24	30.73	28.89	22.95	22.44	22.20
670	1.32	1.49	1.64	22.33	21.67	21.58	20.13	19.68	19.68
663	1.32	1.49	1.63	35.16	36.53	34.48	22.78	22.71	22.67
670	1.32	1.49	1.64	22.33	21.67	21.58	20.13	19.68	19.68
680	1.35	1.52	1.66	17.71	17.76	18.27	17.12	17.15	17.62
690	1.34	1.51	1.66	18.82	19.16	19.87	18.16	18.42	19.05
693	1.34	1.51	1.66	19.77	20.18	20.88	18.94	19.24	19.84
700	1.34	1.51	1.67	22.48	22.97	23.38	20.95	21.24	21.60
705	1.36	1.53	1.69	23.95	24.34	24.34	21.92	22.14	22.24
710	1.38	1.56	1.72	24.35	24.56	24.27	22.31	22.47	22.39
723	1.48	1.67	1.85	22.43	22.41	21.82	21.78	21.83	21.29
750	1.82	2.06	2.29	31.95	32.69	32.04	28.83	28.68	27.52
755	1.95	2.21	2.47	26.66	25.14	22.91	25.17	23.85	21.76
770	2.76	3.15	3.58	22.18	23.03	22.97	16.43	16.08	15.32
780	5.87	6.71	7.80	7.17	6.67	5.91	6.24	5.82	5.19
785	9.89	10.85	12.09	3.40	3.35	3.15	3.07	3.03	2.86
800	23.42	24.20	25.23	1.09	1.19	1.26	1.05	1.15	1.22
810	31.02	31.70	32.59	0.81	0.91	0.98	0.80	0.89	0.97
825	40.70	41.29	42.04	0.63	0.72	0.79	0.64	0.72	0.80
850	53.95	54.50	55.14	0.50	0.58	0.65	0.51	0.59	0.66
900	78.00	78.48	79.22	0.39	0.47	0.53	0.40	0.47	0.54
950	83.88	83.08	83.02	0.34	0.41	0.48	0.34	0.42	0.48
1000	80.43	80.72	80.36	0.30	0.38	0.44	0.31	0.38	0.44
1200	77.76	77.65	77.81	0.21	0.29	0.35	0.21	0.30	0.36
1400	78.75	78.58	78.97	0.18	0.26	0.32	0.17	0.26	0.32
1600	77.45	77.55	77.65	0.18	0.27	0.32	0.17	0.26	0.32
1800	78.98	78.95	78.98	0.20	0.29	0.34	0.19	0.28	0.33
2000	79.58	79.70	79.92	0.23	0.31	0.35	0.22	0.31	0.36
2200	81.78	82.02	81.87	0.24	0.33	0.36	0.23	0.32	0.36
2400	87.09	87.51	87.52	0.23	0.31	0.34	0.23	0.31	0.35
2500	87.42	87.71	87.68	0.22	0.30	0.33	0.22	0.30	0.33
2800	84.62	85.40	84.67	0.16	0.25	0.27	0.15	0.24	0.27
3000	82.65	82.73	81.01	0.11	0.20	0.23	0.10	0.19	0.23
3400	67.20	67.46	67.26	0.04	0.14	0.18	0.02	0.12	0.17
3800	61.74	61.42	60.48	0.06	0.15	0.20	0.04	0.13	0.18
4000	60.47	60.03	59.76	0.07	0.17	0.24	0.04	0.16	0.23
4200	59.04	59.00	59.86	0.11	0.21	0.29	0.06	0.17	0.25
4500	55.37	55.78	55.92	0.19	0.30	0.36	0.13	0.24	0.31
4600	53.29	54.01	54.78	0.22	0.32	0.38	0.14	0.26	0.34
4700	54.46	54.51	54.69	0.22	0.33	0.38	0.14	0.25	0.32
4800	53.85	53.65	54.35	0.23	0.35	0.42	0.15	0.27	0.35
4900	51.72	51.71	51.64	0.25	0.37	0.43	0.15	0.27	0.34
5000	52.07	52.49	51.72	0.25	0.37	0.44	0.16	0.28	0.34



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 • Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

IF/RF MICROWAVE COMPONENTS

REV. OR
MBPA-A693+
201218
Page 1 of 2

Typical Performance Data

FREQ. (MHz)	GROUP DELAY		
	(nsec)		
	@-40°C	@+25°C	@+85°C
663	10.45	10.42	10.37
664	10.41	10.37	10.32
665	10.36	10.32	10.28
666	10.31	10.28	10.23
667	10.26	10.23	10.18
668	10.22	10.18	10.14
669	10.17	10.14	10.10
670	10.12	10.09	10.05
671	10.08	10.05	10.01
672	10.03	10.01	9.97
673	9.99	9.97	9.94
674	9.95	9.93	9.90
675	9.92	9.90	9.87
676	9.88	9.86	9.85
677	9.85	9.84	9.82
678	9.82	9.81	9.80
679	9.80	9.79	9.78
680	9.78	9.77	9.76
681	9.76	9.75	9.74
682	9.74	9.74	9.74
683	9.73	9.72	9.73
684	9.72	9.71	9.72
685	9.71	9.71	9.71
686	9.70	9.70	9.71
687	9.70	9.70	9.71
688	9.70	9.70	9.71
689	9.70	9.70	9.71
690	9.70	9.71	9.72
691	9.70	9.71	9.72
692	9.71	9.71	9.73
693	9.71	9.72	9.74
694	9.73	9.73	9.75
695	9.73	9.74	9.76
696	9.74	9.75	9.77
697	9.75	9.76	9.78
698	9.76	9.78	9.79
699	9.78	9.79	9.80
700	9.79	9.80	9.82
710	9.97	9.99	10.01
720	10.26	10.29	10.33
723	10.38	10.41	10.45